**WORLD VEGETABLE CENTER**

**TRIP REPORT**

**1. Name of traveler(s)**

Inviolate Dominick

**2. Purpose of trip**

The purpose of this trip was to participate in feedback meeting to share findings and lessons regarding Africa RISING with Kilimo Endelevu (KE) partnership project activities conducted in the 1st generation/season (2019) and recommend ways for improvement in the next generation. Secondly to discuss and plan for Africa RISING External evaluation team visit to Karatu

**3. Country(s) visited**

Tanzania

**4. Dates of trip**

31 January-1 February, 2020

**5. Budget source**

Africa RISING- 10000-175-13

**6. List of people met during the trip and their details**

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| --- | --- | --- |
| **Name** | **Title** | **Contact** |
| Silvester. Masanja | Kilimo Endelevu – Project Team Leader | [smasanja@recoda.or.tz](mailto:smasanja@recoda.or.tz) |
| Calib Massam | Field officer - RECODA | cmassam@recoda.or.tz |
| Wayda Peter | Karatu District Council – Focal person | Waydapeter12@gmail.com |
| Abiud Gamba | Agronomist Kilimo Endelevu | +255 784 465879 |
| Musa Chamwilambo | Extension staff- Endelevu- Karatu | + 255 756549677 |
| Ayesiga Buberwa | Project Manager – Kilomo Endelevu | ayesiga.buberwa@tz.ilesdepaix.org |

**7. Important results/information gathered during the trip**

1. PARTNERSHIP FEEDBACK MEETING

Below are the key issues resulted from internal feedback session with Partnership with WorldVeg and Kilimo Endelevu joint activities in Karatu District.

WHAT WENT WELL

* Integrated work plans at all levels were well planned and implemented based on time frame by all Kilimo Endelevu (KE) project ) partners
* The training conducted by Worldview team were very good designed, full of practical sessions which made the farmers aware and remember and practice what they were trained. Training Participants were very much involved step by step in the leaning process through Farmers Field School practically from production, management practices including pest management, postharvest, nutrition and cooking /recipes preparations that involved also the local kiosk and restaurant.
* Monitoring of activities which involved both Africa RISING technical staff with Close follow up with KE staff, staff was contributed to success of project partner’s activities in the field.
* Improved Technologies demonstrated in farmers’ fields made the great difference in the yields (The plots were very good and producing a lot of Healthy vegetables free from industrial pesticides-
* The partnership provide opportunities to share experiences and learn from various expertise from different organisation
* Training farmers on seed production including preparation, made the farmers to have their own seeds even for future use in short time (one production season)
* Flexibility among the researchers, field technical team and project partier officers contributed a lot with the success.
* Demo trials that used as Farmer field Schools and Farmers Field days are the best model to train farmers.
* The Good outcome from demo trials proved that VEGETABLE **PRODUCTION WITHOUT INDUSTRIAL FERTILIZERS AND PESTICIDES IS POSSIBLE** and **that VEGETABLES CONTRIBUTE A LOT IN DIETARY DIVERSITY, AND INCOME.**

AREAS OF IMPROVEMENT:

* There are lot of success/good practices and lessons in the field to boast about, e.g. useful information on farmers perception regarding the technologies demonstrated , tested, partnerships / institutional collaborations – all important for different stakeholders BUT, we are not articulating/documenting them. We should improve in capturing them through documentation, taking pictures, video clips, on Technology transfer as well on Gender involvement and dietary diversity and share for references, lessons and making other people’s aware on what we are doing.
* Improve on communication. (When anyone want to go to the field we better inform earlier the respective partner representative earlier and for good arrangements as well to be aware of what is going on at particular period.
* Farmer field day need to be planned very well. Make it comprehensive, involve other activities. Include other actors like government people, stakeholders and even other farmers from nearby village even if they’re not based in project selected sites.
* The list of farmers participated in any activities including their contacts should well documented for references monitoring and reporting.

2. PREPARATIOS FOR AR EXTERNAL EVALUATION TEARM VISIT IN KARATU DISTICT

Inviolate discuss and shared with the meeting participants the program for the Africa RISING evaluation team visit to Karatu including information that were distributed to the external evaluators for references **(Annex 1**) in order for the KE partners to be aware and get prepared for the event on 7th February, 2020

**8. Suggestions for follow up**

* Inviolate and the team to review and share vegetable production protocol for Demo plots for 2020 season with KE project Manager and the field staff based in Karatu, for references and that they can be aware and speak the same language to the farmers
* World Veg technical team (Agronomist) to develop and share the fact sheet on pest and diseases mostly affecting vegetable in project selected villages including control measures (Natural pesticides and recommended botanicals)
* Inviolate to organise feedback meeting to farmers and field staffs in KE selected sites to discuss, share experiences, challenges, lessons and outcomes from 1st generation demo plots, and plan together for the next steps.

**9. Photos or other supporting documents**

Annex 1

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| **Activity – Karatu**  **7th February, 2020** | Demonstration of extension approaches for scaling postharvest technologies and vegetable management |
| **Lead Researchers** | Inviolate Dominick (Vegetables); Christopher Mutungi (postharvest) |
| **Host farmer** | Bakari Hamisi (a farmer trainer from, Rhotia Khainam village. |
| **Stakeholder attendance (category and anticipated number)** | Farmers (25-50), District and village extension officers (2-4), IDP staff (2), researchers (3) and local leaders (3-6). |
| **Activity Summary with references to documents** | Africa RISING has been validating (most of the literature) vegetable management practices and post-harvest technologies thorough research trials, and facilitating their transfer to farmers in Babati District through demonstrations that are used as learning centres and for hosting field days since 2014. In 2018/2019, it expanded expand its scaling activities into Karatu District and partnered with Iles de Paix (IDP) to scale best bet technologies that include use of improved vegetable varieties and good agricultural practices (GAP) such as integrated pest management (IPM) to reduce pest and disease incidences, reduce pesticides use in vegetable production and increase overall farm productivity.  At postharvest level, the aim is to transfer to farmers, processors, and other stakeholders validated technologies for improved postharvest management to reduce food losses, increase food safety, enhance nutrition, and raise produce quality by demonstrating improved harvesting, handling, processing, and storage techniques for maize and legumes.  **Literature (Vegetables)**    Lazaro, V., Rajendran, S., Afari-Sefa, V., & Kazuzuru, B. (2017). Analysis of good agricultural practices in an integrated maize-based farming system. International journal of vegetable science, 23(6), 598-604. <http://dx.doi.org/10.1080/19315260.2017.1341445>  Lukumay, P. J., Afari-Sefa, V., Ochieng, J., Dominick, I., Coyne, D., & Chagomoka, T. (2016). Yield response and economic performance of participatory evaluated elite vegetable cultivars in intensive farming systems in Tanzania. Acta Hortic. 1205, 75-86. <https://doi.org/10.17660/ActaHortic.2018.1205.9>    Rajendran, S., Afari-Sefa, V., Shee, A., Bocher, T., Bekunda, M., & Lukumay, P. J. (2017). Does crop diversity contribute to dietary diversity? Evidence from integration of vegetables into maize-based farming systems. Agriculture & Food Security, 6(1), 50. <https://link.springer.com/article/10.1186/s40066-017-0127-3>  Habiyaremye, N., Tabe-Ojong, M. P. J., Ochieng, J., & Chagomoka, T. (2019). New insights on efficiency and productivity analysis: Evidence from vegetable-poultry integration in rural Tanzania. Scientific African, 6, e00190. <https://www.sciencedirect.com/science/article/pii/S2468227619307513>  Aku, A., Mshenga, P., Afari-Sefa, V., & Ochieng, J. (2018). Effect of market access provided by farmer organizations on smallholder vegetable farmer’s income in Tanzania. Cogent Food & Agriculture, 4(1), 1560596. Cogent Food & Agriculture 4:1560596. <https://doi.org/10.1080/23311932.2018.1560596>  Ochieng, J., Afari-Sefa, V., Lukumay, P., Muthoni, F., Gramzow, A., & Dominic, I. (2019). Smallholder farmers' adoption of vegetable production technologies in Babati District, Tanzania. Acta Hortic. 1255, 197-202. DOI: 10.17660/ActaHortic.2019.1255.31  <https://doi.org/10.17660/ActaHortic.2019.1255.31>  Habiyaremye, N., Ochieng, J., & Heckelei, T. (2019). Economic analysis of integrated vegetable-poultry production systems in the Babati District of Tanzania (No. 295750). African Association of Agricultural Economists (AAAE), (Under review in Agrekon). <http://dx.doi.org/10.22004/ag.econ.295750>  **Theses**  Naphtal, H. (2018). Economic analysis of integrated vegetable and poultry production systems in the Babati District of Tanzania (Msc dissertation, University of Bonn).  <https://cgspace.cgiar.org/handle/10568/102165>  Aku, A.O. (2017). Influence of farmer organizations as a market information system on market access and income of smallholder vegetable farmers in Babati District, Tanzania. MSc thesis in Agricultural Economics. Nakuru, Kenya: Egerton University. <https://hdl.handle.net/10568/90677>  Pallangyo, V.L. 2015. Newly introduced AVRDC vegetable technologies in reduction of income poverty: Babati District, Tanzania. MA thesis in Art in Rural Development. Morogoro, Tanzania: Sokoine University of Agriculture. <https://hdl.handle.net/10568/100240>  Mary Mtui (2017) Economic Cost Evaluation Of Selected Vegetable Post-Harvest Losses In Babati District Tanzania. MSc thesis in Agricultural Economics. Nakuru, Kenya: Egerton University.  **Conference papers.**  Zekeya, N., Dominick, I., Ochieng, J., Dubois, T., & Ramasamy, S. Integrated pest management for Bemisia tabaci and Tuta absoluta on solanaceous vegetables in Tanzania. In *XXX International Horticultural Congress, Istanbul, Turkey, 2018-08-12, 2018-08-16* <https://worldveg.tind.io/record/66669/>  **Extension bulletins/success stories**     1. Turning over a new leaf: How Amaranth farming has transformed the life of a woman farmer in Tanzania <https://africa-rising.net/amaranth-tanzania/> 2. Success story online: <https://africa-rising.net/next-generation-rising-video/> 3. From trainee to model farmer   <https://avrdc.org/from-trainee-to-model-farmer/>   1. Identify, then control. <https://avrdc.org/identify-then-control/> 2. Tanzania farmers embrace vegetable farming to access more high-value markets and improve nutrition. <https://africa-rising.net/2017/10/30/tanzania-farmers-embrace-vegetable-farming-to-access-more-high-value-markets-and-improve-nutrition/> 3. Farmers learn together during field days. <https://avrdc.org/farmers-learn-together-field-days/> 4. Photo report: starting page <https://cgspace.cgiar.org/bitstream/handle/10568/93070/Tanzania_photo_report.pdf?sequence=1>   **Literature (Postharvest)**   1. Abass, A. B., Ndunguru, G., Mamiro, P., Alenkhe, B., Mlingi, N., Bekunda, M., 2014. Post-harvest food losses in a maize-based farming system of semi-arid savannah area of Tanzania. J. Stored Prod. Res. 57, 49-57. <https://doi.org/10.1016/j.jspr.2013.12.004> 2. Abass, A. B., Fischler, M., Schneider, K, Daudi, S., Gaspar, A., Rüst, J, Kabula, E., Ndunguru, G., Madulu, D, Msola, D., 2018. On-farm comparison of different postharvest storage technologies in a maize farming system of Tanzania Central Corridor. J. Stored Prod. Res. 77, 55-65. <https://doi.org/10.1016/j.jspr.2018.03.002> 3. Kotu, B.H., Abass, A.B., Hoeschle-Zeledon,I., Mbwambo, H. and Bekunda, M. 2019. Exploring the profitability of improved storage technologies and their potential impacts on food security and income of smallholder farm households in Tanzania. Journal of Stored Products Research 82, 98-109. <https://doi.org/10.1016/j.jspr.2019.04.003> 4. Mutungi C., Muthoni F., Bekunda M., Gaspar A., Kabula E., Abass A. (2019) Physical quality of maize grain harvested and stored by smallholder farmers in the Northern highlands of Tanzania: Effects of harvesting and pre-storage handling practices in two marginally contrasting agro-locations. Journal of Stored Products Research 84:101517.DOI:<https://doi.org/10.1016/j.jspr.2019.101517.>   **For wider audience**   1. Kotu, B., Abass, A., Gaspar, A., Fischer, G., Mutungi, C., Hoeschle-Zeledon, I. and Bekunda, M. 2019. Calling for mechanization: Farmers’ willingness to pay for small-scale maize shelling machines in Tanzania. <https://cgspace.cgiar.org/handle/10568/105610> 2. Mutungi, C., Kotu, B. and Abass, A. 2018. Improved technologies for mitigating post-harvest food loss. <https://cgspace.cgiar.org/handle/10568/100111> 3. Kizito, F., Kiao, P., Sabula, L., Sseguya, H., Baijukya, F., Mutungi, C. and Masigo, J. 2019. ICT messaging as a promising technology delivery mechanism for smallholder resilience. <https://cgspace.cgiar.org/handle/10568/105527> 4. Kotu, B., Abass, A., Hoeschle-Zeledon, I., Mbwambo, H. and Bekunda, M. 2018. Returns to improved storage and potential impacts on household food security and income: Evidence from Tanzania. <https://cgspace.cgiar.org/handle/10568/99493> 5. Kotu, B., Fischer, G., Muthoni, F., Abass, A., Hoeschle-Zeledon, I. and Bekunda, M. 2018. Exploring farmers’ willingness to pay for small scale maize shelling machines in Tanzania. <https://cgspace.cgiar.org/handle/10568/99536> 6. Mutungi, C., Gasper, A., Bekunda, M. and Abass, A. 2019. Implementing community-based nutrition intervention through farmer-to-farmer technology delivery. Poster prepared for the IITA Board of Trustees Annual Spring Meeting, Arusha, Tanzania, 6-10 May 2019. Ibadan, Nigeria: IITA. <https://cgspace.cgiar.org/handle/10568/105831> |

**Activity – Karatu. Meeting with Kilimo Endelevu partners-** Debriefing with Africa RISING Core Team & other available partners